

## RAW SEQUENCE LISTING

The Biotechnology Systems Branch of the Scientific and Technical  
Information Center (STIC) no errors detected.

Application Serial Number: 10/824,036  
Source: IFWB  
Date Processed by STIC: 10/22/04

# ***ENTERED***



IFWO

## RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/824,036

DATE: 10/22/2004

TIME: 12:47:55

Input Set : N:\FANTU\10824036.txt

Output Set: N:\CRF4\10222004\J824036.raw

3 <110> APPLICANT: Sirna Therapeutics, Inc.  
4 McSwiggen, James  
6 <120> TITLE OF INVENTION: RNA Interference Mediated Treatment of Polyglutamine (PolyQ)  
Repeat  
7 Expansion Diseases Using Short Interfering Nucleic Acid (siNA)  
9 <130> FILE REFERENCE: 04-105 (400.146)  
C--> 11 <140> CURRENT APPLICATION NUMBER: US/10/824,036  
C--> 12 <141> CURRENT FILING DATE: 2004-04-14  
14 <150> PRIOR APPLICATION NUMBER: US 10/757,803  
15 <151> PRIOR FILING DATE: 2004-01-14  
17 <150> PRIOR APPLICATION NUMBER: US 10/720,448  
18 <151> PRIOR FILING DATE: 2003-11-24  
20 <150> PRIOR APPLICATION NUMBER: US 10/693,059  
21 <151> PRIOR FILING DATE: 2003-10-23  
23 <150> PRIOR APPLICATION NUMBER: US 10/444,853  
24 <151> PRIOR FILING DATE: 2003-05-23  
26 <150> PRIOR APPLICATION NUMBER: US 10/652,791  
27 <151> PRIOR FILING DATE: 2003-03-29  
29 <150> PRIOR APPLICATION NUMBER: US 10/422,704  
30 <151> PRIOR FILING DATE: 2003-04-24  
32 <150> PRIOR APPLICATION NUMBER: US 10/417,012  
33 <151> PRIOR FILING DATE: 2003-04-16  
35 <150> PRIOR APPLICATION NUMBER: PCT/US03/05346  
36 <151> PRIOR FILING DATE: 2003-02-20  
38 <150> PRIOR APPLICATION NUMBER: PCT/US03/05028  
39 <151> PRIOR FILING DATE: 2003-02-20  
41 <150> PRIOR APPLICATION NUMBER: US 60/358,580  
42 <151> PRIOR FILING DATE: 2002-02-20  
44 <150> PRIOR APPLICATION NUMBER: US 60/363,124  
45 <151> PRIOR FILING DATE: 2002-03-11  
47 <150> PRIOR APPLICATION NUMBER: US 60/386,782  
48 <151> PRIOR FILING DATE: 2002-06-06  
50 <150> PRIOR APPLICATION NUMBER: US 60/406,784  
51 <151> PRIOR FILING DATE: 2002-08-29  
53 <150> PRIOR APPLICATION NUMBER: US 60/408,378  
54 <151> PRIOR FILING DATE: 2002-09-05  
56 <150> PRIOR APPLICATION NUMBER: US 60/409,293  
57 <151> PRIOR FILING DATE: 2002-09-09  
59 <150> PRIOR APPLICATION NUMBER: US 60/440,129  
60 <151> PRIOR FILING DATE: 2003-01-15  
62 <150> PRIOR APPLICATION NUMBER: US 10/427,160  
63 <151> PRIOR FILING DATE: 2003-04-30  
65 <150> PRIOR APPLICATION NUMBER: PCT/US02/15876  
66 <151> PRIOR FILING DATE: 2002-05-17

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68 &lt;160&gt; NUMBER OF SEQ ID NOS: 3581

70 &lt;170&gt; SOFTWARE: PatentIn version 3.1

72 &lt;210&gt; SEQ ID NO: 1

73 &lt;211&gt; LENGTH: 19

74 &lt;212&gt; TYPE: RNA

75 &lt;213&gt; ORGANISM: Artificial Sequence

77 &lt;220&gt; FEATURE:

78 <223> OTHER INFORMATION: Description of Artificial Sequence: Target Sequence/siNA  
sense region

80 &lt;400&gt; SEQUENCE: 1

81 caaucaugcu ggccggcgu

19

84 &lt;210&gt; SEQ ID NO: 2

85 &lt;211&gt; LENGTH: 19

86 &lt;212&gt; TYPE: RNA

87 &lt;213&gt; ORGANISM: Artificial Sequence

89 &lt;220&gt; FEATURE:

90 <223> OTHER INFORMATION: Description of Artificial Sequence: Target Sequence/siNA  
sense region

92 &lt;400&gt; SEQUENCE: 2

93 aaucaugcug gccggcgug

19

96 &lt;210&gt; SEQ ID NO: 3

97 &lt;211&gt; LENGTH: 19

98 &lt;212&gt; TYPE: RNA

99 &lt;213&gt; ORGANISM: Artificial Sequence

101 &lt;220&gt; FEATURE:

102 <223> OTHER INFORMATION: Description of Artificial Sequence: Target Sequence/siNA  
sense region

104 &lt;400&gt; SEQUENCE: 3

105 aucaugcugg ccggcgugg

19

108 &lt;210&gt; SEQ ID NO: 4

109 &lt;211&gt; LENGTH: 19

110 &lt;212&gt; TYPE: RNA

111 &lt;213&gt; ORGANISM: Artificial Sequence

113 &lt;220&gt; FEATURE:

114 <223> OTHER INFORMATION: Description of Artificial Sequence: Target Sequence/siNA  
sense region

116 &lt;400&gt; SEQUENCE: 4

117 ucaugcuggc cggcguggc

19

120 &lt;210&gt; SEQ ID NO: 5

121 &lt;211&gt; LENGTH: 19

122 &lt;212&gt; TYPE: RNA

123 &lt;213&gt; ORGANISM: Artificial Sequence

125 &lt;220&gt; FEATURE:

126 <223> OTHER INFORMATION: Description of Artificial Sequence: Target Sequence/siNA  
sense region

128 &lt;400&gt; SEQUENCE: 5

129 caugcuggcc ggcguggcc

19

132 &lt;210&gt; SEQ ID NO: 6

133 &lt;211&gt; LENGTH: 19

134 &lt;212&gt; TYPE: RNA

135 &lt;213&gt; ORGANISM: Artificial Sequence

137 &lt;220&gt; FEATURE:

138 &lt;223&gt; OTHER INFORMATION: Description of Artificial Sequence: Target Sequence/siNA

sense region

140 <400> SEQUENCE: 6

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Input Set : N:\FANTU\10824036.txt

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141 augcuggccg gcguggccc                                     19
144 <210> SEQ ID NO: 7
145 <211> LENGTH: 19
146 <212> TYPE: RNA
147 <213> ORGANISM: Artificial Sequence
149 <220> FEATURE:
150 <223> OTHER INFORMATION: Description of Artificial Sequence: Target Sequence/siNA
sense region
152 <400> SEQUENCE: 7
153 ugcuggccgg cguggcccc                                     19
156 <210> SEQ ID NO: 8
157 <211> LENGTH: 19
158 <212> TYPE: RNA
159 <213> ORGANISM: Artificial Sequence
161 <220> FEATURE:
162 <223> OTHER INFORMATION: Description of Artificial Sequence: Target Sequence/siNA
sense region
164 <400> SEQUENCE: 8
165 gcuggccggc guggccccg                                     19
168 <210> SEQ ID NO: 9
169 <211> LENGTH: 19
170 <212> TYPE: RNA
171 <213> ORGANISM: Artificial Sequence
173 <220> FEATURE:
174 <223> OTHER INFORMATION: Description of Artificial Sequence: Target Sequence/siNA
sense region
176 <400> SEQUENCE: 9
177 cuggccggcg uggccccgc                                     19
180 <210> SEQ ID NO: 10
181 <211> LENGTH: 19
182 <212> TYPE: RNA
183 <213> ORGANISM: Artificial Sequence
185 <220> FEATURE:
186 <223> OTHER INFORMATION: Description of Artificial Sequence: Target Sequence/siNA
sense region
188 <400> SEQUENCE: 10
189 uggccggcgu ggccccgcc                                     19
192 <210> SEQ ID NO: 11
193 <211> LENGTH: 19
194 <212> TYPE: RNA
195 <213> ORGANISM: Artificial Sequence
197 <220> FEATURE:
198 <223> OTHER INFORMATION: Description of Artificial Sequence: Target Sequence/siNA
sense region
200 <400> SEQUENCE: 11
201 ggccggcgug gccccgccu                                     19
204 <210> SEQ ID NO: 12
205 <211> LENGTH: 19
206 <212> TYPE: RNA
207 <213> ORGANISM: Artificial Sequence
209 <220> FEATURE:
210 <223> OTHER INFORMATION: Description of Artificial Sequence: Target Sequence/siNA
sense region

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212 <400> SEQUENCE: 12  
213 gccggcgugg ccccgccuc

19

## RAW SEQUENCE LISTING

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Input Set : N:\FANTU\10824036.txt

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216 <210> SEQ ID NO: 13
217 <211> LENGTH: 19
218 <212> TYPE: RNA
219 <213> ORGANISM: Artificial Sequence
221 <220> FEATURE:
222 <223> OTHER INFORMATION: Description of Artificial Sequence: Target Sequence/siNA
sense region
224 <400> SEQUENCE: 13
225 ccggcguggc ccgccuccc
228 <210> SEQ ID NO: 14
229 <211> LENGTH: 19
230 <212> TYPE: RNA
231 <213> ORGANISM: Artificial Sequence
233 <220> FEATURE:
234 <223> OTHER INFORMATION: Description of Artificial Sequence: Target Sequence/siNA
sense region
236 <400> SEQUENCE: 14
237 cggcguggcc ccgccuccg
240 <210> SEQ ID NO: 15
241 <211> LENGTH: 19
242 <212> TYPE: RNA
243 <213> ORGANISM: Artificial Sequence
245 <220> FEATURE:
246 <223> OTHER INFORMATION: Description of Artificial Sequence: Target Sequence/siNA
sense region
248 <400> SEQUENCE: 15
249 ggcguggccc cgcuccgc
252 <210> SEQ ID NO: 16
253 <211> LENGTH: 19
254 <212> TYPE: RNA
255 <213> ORGANISM: Artificial Sequence
257 <220> FEATURE:
258 <223> OTHER INFORMATION: Description of Artificial Sequence: Target Sequence/siNA
sense region
260 <400> SEQUENCE: 16
261 gcguggcccc gccuccgcc
264 <210> SEQ ID NO: 17
265 <211> LENGTH: 19
266 <212> TYPE: RNA
267 <213> ORGANISM: Artificial Sequence
269 <220> FEATURE:
270 <223> OTHER INFORMATION: Description of Artificial Sequence: Target Sequence/siNA
sense region
272 <400> SEQUENCE: 17
273 cguggccccg ccuccgccg
276 <210> SEQ ID NO: 18
277 <211> LENGTH: 19
278 <212> TYPE: RNA
279 <213> ORGANISM: Artificial Sequence
281 <220> FEATURE:
282 <223> OTHER INFORMATION: Description of Artificial Sequence: Target Sequence/siNA
sense region
284 <400> SEQUENCE: 18

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285 guggccccgc cuccgccgg  
288 <210> SEQ ID NO: 19

19



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Input Set : N:\FANTU\10824036.txt

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289 <211> LENGTH: 19
290 <212> TYPE: RNA
291 <213> ORGANISM: Artificial Sequence
293 <220> FEATURE:
294 <223> OTHER INFORMATION: Description of Artificial Sequence: Target Sequence/siNA
sense region
296 <400> SEQUENCE: 19
297 uggccccgcc uccgccggc
300 <210> SEQ ID NO: 20
301 <211> LENGTH: 19
302 <212> TYPE: RNA
303 <213> ORGANISM: Artificial Sequence
305 <220> FEATURE:
306 <223> OTHER INFORMATION: Description of Artificial Sequence: Target Sequence/siNA
sense region
308 <400> SEQUENCE: 20
309 caaucaugcu gccggcgcg
312 <210> SEQ ID NO: 21
313 <211> LENGTH: 19
314 <212> TYPE: RNA
315 <213> ORGANISM: Artificial Sequence
317 <220> FEATURE:
318 <223> OTHER INFORMATION: Description of Artificial Sequence: Target Sequence/siNA
sense region
320 <400> SEQUENCE: 21
321 aaucaugcug gccggcgcg
324 <210> SEQ ID NO: 22
325 <211> LENGTH: 19
326 <212> TYPE: RNA
327 <213> ORGANISM: Artificial Sequence
329 <220> FEATURE:
330 <223> OTHER INFORMATION: Description of Artificial Sequence: Target Sequence/siNA
sense region
332 <400> SEQUENCE: 22
333 aucaugcugg ccggcgcg
336 <210> SEQ ID NO: 23
337 <211> LENGTH: 19
338 <212> TYPE: RNA
339 <213> ORGANISM: Artificial Sequence
341 <220> FEATURE:
342 <223> OTHER INFORMATION: Description of Artificial Sequence: Target Sequence/siNA
sense region
344 <400> SEQUENCE: 23
345 ucaugcuggc cgggcgggc
348 <210> SEQ ID NO: 24
349 <211> LENGTH: 19
350 <212> TYPE: RNA
351 <213> ORGANISM: Artificial Sequence
353 <220> FEATURE:
354 <223> OTHER INFORMATION: Description of Artificial Sequence: Target Sequence/siNA
sense region
356 <400> SEQUENCE: 24
357 caugcuggcc ggcgcggcc

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360 <210> SEQ ID NO: 25  
361 <211> LENGTH: 19

RAW SEQUENCE LISTING ERROR SUMMARY  
PATENT APPLICATION: US/10/824,036

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Input Set : N:\FANTU\10824036.txt  
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Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:1003; N Pos. 19  
Seq#:1004; N Pos. 18  
Seq#:1005; N Pos. 17  
Seq#:1006; N Pos. 16  
Seq#:1007; N Pos. 15  
Seq#:1008; N Pos. 14  
Seq#:1009; N Pos. 13  
Seq#:1010; N Pos. 12  
Seq#:1011; N Pos. 11  
Seq#:1012; N Pos. 10  
Seq#:1013; N Pos. 9  
Seq#:1014; N Pos. 8  
Seq#:1015; N Pos. 7  
Seq#:1016; N Pos. 6  
Seq#:1017; N Pos. 5  
Seq#:1018; N Pos. 4  
Seq#:1019; N Pos. 3  
Seq#:1020; N Pos. 2  
Seq#:1021; N Pos. 1  
Seq#:3512; N Pos. 20,21  
Seq#:3513; N Pos. 20,21  
Seq#:3514; N Pos. 20,21  
Seq#:3515; N Pos. 20,21  
Seq#:3516; N Pos. 20,21  
Seq#:3517; N Pos. 20,21  
Seq#:3518; N Pos. 20,21  
Seq#:3519; N Pos. 20,21  
Seq#:3520; N Pos. 20,21  
Seq#:3521; N Pos. 20,21  
Seq#:3522; N Pos. 20,21  
Seq#:3523; N Pos. 20,21  
Seq#:3524; N Pos. 20,21  
Seq#:3525; N Pos. 20,21  
Seq#:3526; N Pos. 20,21  
Seq#:3527; N Pos. 20,21  
Seq#:3528; N Pos. 20,21  
Seq#:3529; N Pos. 20,21  
Seq#:3530; N Pos. 20,21  
Seq#:3531; N Pos. 20,21  
Seq#:3532; N Pos. 20,21  
Seq#:3533; N Pos. 20,21  
Seq#:3534; N Pos. 20,21  
Seq#:3535; N Pos. 20,21  
Seq#:3536; N Pos. 20,21

RAW SEQUENCE LISTING ERROR SUMMARY  
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Input Set : N:\FANTU\10824036.txt  
Output Set: N:\CRF4\10222004\J824036.raw

Seq#:3537; N Pos. 20,21  
Seq#:3538; N Pos. 20,21  
Seq#:3539; N Pos. 20,21  
Seq#:3540; N Pos. 20,21  
Seq#:3541; N Pos. 20,21  
Seq#:3542; N Pos. 20,21  
Seq#:3543; N Pos. 20,21

Invalid Line Length:

The rules require that a line not exceed 72 characters in length. This includes spaces.

Seq#:3562; Line(s) 44550

## VERIFICATION SUMMARY

PATENT APPLICATION: US/10/824,036

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Input Set : N:\FANTU\10824036.txt

Output Set: N:\CRF4\10222004\J824036.raw

L:11 M:270 C: Current Application Number differs, Replaced Current Application Number  
L:12 M:271 C: Current Filing Date differs, Replaced Current Filing Date  
L:12111 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1003 after pos.:0  
L:12129 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1004 after pos.:0  
L:12147 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1005 after pos.:0  
L:12165 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1006 after pos.:0  
L:12183 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1007 after pos.:0  
L:12201 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1008 after pos.:0  
L:12219 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1009 after pos.:0  
L:12237 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1010 after pos.:0  
L:12255 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1011 after pos.:0  
L:12273 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1012 after pos.:0  
L:12291 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1013 after pos.:0  
L:12309 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1014 after pos.:0  
L:12327 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1015 after pos.:0  
L:12345 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1016 after pos.:0  
L:12363 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1017 after pos.:0  
L:12381 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1018 after pos.:0  
L:12399 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1019 after pos.:0  
L:12417 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1020 after pos.:0  
L:12435 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1021 after pos.:0  
L:42333 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3512 after pos.:0  
L:42351 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3513 after pos.:0  
L:42393 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3514 after pos.:0  
L:42435 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3515 after pos.:0  
L:42489 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3516 after pos.:0  
L:42543 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3517 after pos.:0  
L:42561 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3518 after pos.:0  
L:42579 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3519 after pos.:0  
L:42621 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3520 after pos.:0  
L:42663 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3521 after pos.:0  
L:42723 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3522 after pos.:0  
L:42771 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3523 after pos.:0  
L:42825 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3524 after pos.:0  
L:42873 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3525 after pos.:0  
L:42915 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3526 after pos.:0  
L:42975 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3527 after pos.:0  
L:43017 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3528 after pos.:0  
L:43065 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3529 after pos.:0  
L:43113 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3530 after pos.:0  
L:43161 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3531 after pos.:0  
L:43203 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3532 after pos.:0  
L:43257 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3533 after pos.:0  
L:43293 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3534 after pos.:0  
L:43335 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3535 after pos.:0  
L:43413 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3536 after pos.:0  
L:43485 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3537 after pos.:0  
L:43545 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3538 after pos.:0

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Input Set : N:\FANTU\10824036.txt

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L:43635 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3539 after pos.:0  
L:43689 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3540 after pos.:0  
L:43755 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3541 after pos.:0  
L:43827 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3542 after pos.:0